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			EXAMINER	
			NALEVANKO, CHRISTOPHER R	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/644,198

Applicant(s)

ITO ET AL.

Examiner

Christopher R Nalevanko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims "the representative frame is identified by measuring the time from the beginning of the stream to the time of receiving the second user-provided command." It is widely recognized that a frame is one instant in time in a set of moving pictures. The Examiner fails to understand how a frame can be denoted by a "measurement of time." The Examiner believes the Applicant is referring to the instant a user provides the command but this is not clear. Further clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4-6, 8, 9, 12, 14, 15, 29-31, 33, and 34 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Matthews, III (5,815,145).

Regarding Claim 1, Matthews shows an apparatus for accessing content contained on a storage medium (col. 9 lines 40-55, col. 11 lines 20-47, "media servers provide

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storage and on-demand or near on-demand delivery of digitized video... full length motion pictures”), the content comprising plural frames, the frames organized into plural scenes, the scenes organized into plural programs (col. 3 lines 20-25, col. 4 lines 45-61, col. 7 lines 60-65, full motion MPEG-2 video, “multi-frame video segment relating to programming available on a corresponding one of the selected channels”). Matthews further shows a driver module configured to access the content and having a driver output to produce an information signal representing the content (col. 3 lines 30-67, col. 4 lines 1-42, “interactive station controller 20 transmit digital information to and receive digital information from central node 12”, “station controller includes an input that delivers communications or information from central control node to a communication interpretation system”, “network communications interface 62c”), a decoder module operatively couple to the driver module to receive the information signal (col. 3 lines 60-63, digital video decoder), a user input module configured to receive user input (col. 4 lines 11-18, infrared receiver and decoder system that receives user input from a hand-held view control unit), and a system control module (col. 4 lines 9-18, CPU). Matthews also shows that the system control module, or CPU, controls the driver and decoder modules to generate program identification information for each of the programs and to produce a first display signal representing the program information (col. 4 lines 9-25, 45-67, “channel identification panel... includes channel number, channel logo or icon, and a name”), and wherein the control module, in response to a user selection, controls the driver module to access a representative frame for each scene comprising the program

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corresponding to the program selection and controls the decoder to produce a representative frame (col. 4 lines 45-67, “video tile” and “multi-frame video segment”).

Regarding Claim 2, Matthews shows that the content is visual information, audio information, or a combination (col. 3 lines 15-45, col. 7 lines 20-30).

Regarding Claim 4, Matthews shows a data store (col. 6 lines 35-67, “memory of station controller”) coupled to receive location data present in the information signal, the location data indicating the location of the scenes contained on the storage medium, wherein the driver module accesses a representative frame based on the location data (col. 6 lines 35-67, col. 7 lines 21-67, col. 8 lines 1-35, EPG databases contains pointers to previews or display imagery relating to the series in still image, audio, or multi-frame digital video format).

Regarding Claim 5, Matthews shows a display device (col. 4 lines 20-25).

Regarding Claim 6, Matthews further shows that after a user has selected the one of the representative frames, the decoder module produces a signal of the program, effectively showing one or more frames (col. 6 lines 1-34, col. 9 lines 40-55, Matthews shows that when a user highlights a still-frame, a multi-frame video sequence or broadcast is shown, effectively showing the program or movie).

Regarding Claim 8, Matthews shows that the user may change the number of video tiles presented on screen, effectively changing the scaling of a tile (col. 10 lines 45-63).

Regarding Claim 9, Matthews shows that the program identification includes channel numbers associated with the program or video (col. 4 lines 55-61, col. 10 lines 25-46).

Regarding Claim 12, Matthews shows that information is provided that identifies the representative frames (col. 4 lines 55-61, col. 10 lines 25-46, fig. 4 102a).

Regarding Claim 14, Matthews shows that the display signal comprises a row of tabs (fig. 4 item 106) comprising an id symbol identifying one of the programs (fig. 4 item 106a), the representative frames being arranged in row and column fashion (fig. 4), and the tab corresponding to the user selection being visually distinct from the other tabs (fig. 4 item 102a).

Regarding Claim 15, Matthews shows that the id symbols are numerical values (fig. 4 item 106a).

Regarding Claim 29, Matthews shows a method of accessing content contained on a storage medium (col. 9 lines 40-55, col. 11 lines 20-47, “media servers provide storage and on-demand or near on-demand delivery of digitized video... full length motion pictures”), the content being audio information, visual information, or audio-visual information, the content being organized into plural programs, each program comprising plural scenes, each scene comprising plural frames (col. 3 lines 20-25, col. 4 lines 45-61, col. 7 lines 60-65, full motion MPEG-2 video, “multi-frame video segment relating to programming available on a corresponding one of the selected channels”). Matthews also shows producing a first display signal representing first information comprising a representative frame from a scene from each program (col. 4 lines 45-67, “video tile” and

“multi-frame video segment”) and receiving a program selection and in response producing a second display signal comprising one or more of the scenes associated with the selected program (col. 6 lines 1-34, col. 9 lines 40-55, Matthews shows that when a user highlights a still-frame, a multi-frame video sequence or broadcast is shown, effectively showing the program or movie).

Regarding Claim 30, Matthews shows receiving a user-specified one of the representative frames, and accessing one or more frames of the scene associated with the user-specified one of the representative frames (col. 6 lines 1-34, col. 9 lines 40-55, Matthews shows that when a user highlights a still-frame, a multi-frame video sequence or broadcast is shown, effectively showing the program or movie).

Regarding Claim 31, Matthews shows that the display signal comprises a row of tabs (fig. 4 item 106) comprising an id symbol identifying one of the programs (fig. 4 item 106a), the representative frames being arranged in row and column fashion (fig. 4), and the tab corresponding to the user selection being visually distinct from the other tabs (fig. 4 item 102a).

Regarding Claim 33, Matthews shows an apparatus for accessing content contained on a storage medium (col. 9 lines 40-55, col. 11 lines 20-47, “media servers provide storage and on-demand or near on-demand delivery of digitized video... full length motion pictures”), the content comprising plural frames, the frames organized into plural scenes, the scenes organized into plural programs (col. 3 lines 20-25, col. 4 lines 45-61, col. 7 lines 60-65, full motion MPEG-2 video, “multi-frame video segment relating to programming available on a corresponding one of the selected channels”).

Matthews further shows identifying the programs on the storage device, producing a first signal containing information relating to the programs (col. 4 lines 9-25, 45-67, "channel identification panel...includes channel number, channel logo or icon, and a name"), a means for receiving information relating to a selected program, and producing a second signal containing information relating to one or more of the scenes associated with the program (col. 4 lines 45-67, "video tile" and "multi-frame video segment", col. 6 lines 1-34, col. 9 lines 40-55, Matthews shows that when a user highlights a still-frame, a multi-frame video sequence or broadcast is shown, effectively showing the program or movie).

Regarding Claim 34, the limitations of the claim have been discussed with regards to Claim 33.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews III (5,815,145) in further view of Goldschmidt Iki et al (6,295,646).

Regarding Claim 7, Matthews fails to show display the signal in fullscreen. Goldschmidt Iki shows displaying a selected tile image in fullscreen (col. 9 lines 30-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews with the ability to display the program in full screen to

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allow the user to view the program with higher resolution and a larger display area to ease the viewing.

4. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews III (5,815,145) in further view of Legrand (6,020,930).

Regarding Claim 3, Matthews shows that the representative frames are of a scene from the selected programs (col. 6 lines 35-63), but fails to specifically state that it is a first scene. Legrand shows that representative frames are formed from the I-frames of an MPEG stream (col. 7 lines 29-37), which is necessarily to first data or scene received by a receiver in an MPEG stream. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Matthews with the I-frame selection of Legrand so that the system would use a complete and full frame of video for the representative frame. Furthermore, the I-frame would provide the most video data, allowing the system to manipulate the frame if necessary.

Regarding Claim 13, Matthews shows that the frames are formatted in the MPEG standard (col. 3 lines 2-24), but fails to specifically state that the representative frames are I-frames. Legrand shows that representative frames are formed from the I-frames of an MPEG stream (col. 7 lines 29-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Matthews with the I-frame selection of Legrand so that the system would use a complete and full frame of video for the representative frame. Furthermore, the I-frame would provide the most video data, allowing the system to manipulate the frame if necessary.

5. Claims 17-19, 22-24, 27-28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews III (5,815,145) in further view of Steyer et al (5,822,014).

Regarding Claim 17, Matthews shows a content input component (col. 3 lines 50-67, input 60 that delivers communications or information from central control node...having...an analog television demodulator, a digital video decoder, and a digital network interface) but fails to show that this component records audio-visual information, the content input component producing a signal representing the A/V information, and the driver module configured to store the information on a storage medium. Steyer shows a content input component capable of storing audio-visual material (col. 1 lines 55-61, col. 3 lines 55-61, col. 6 lines 1-3, fig. 3 item 35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews with the ability to record a selected program so that the user could watch the program at his or her leisure.

Regarding Claim 18, Steyer shows that the video data is MPEG-2 data (col. 4 lines 1-13). This type of data inherently contains frames that are organized into scenes and programs.

Regarding Claim 19, Matthews shows an apparatus for accessing content contained on a storage medium (col. 9 lines 40-55, col. 11 lines 20-47, “media servers provide storage and on-demand or near on-demand delivery of digitized video...full length motion pictures”), the content comprising plural frames (col. 3 lines 20-25, col. 4 lines 45-61, col. 7 lines 60-65, full motion MPEG-2 video, “multi-frame video segment relating to programming available on a corresponding one of the selected channels”).

Matthews further shows a Matthews shows a content input component (col. 3 lines 50-67, input 60 that delivers communications or information from central control node...having...an analog television demodulator, a digital video decoder, and a digital network interface) and a driver module configured to access the content and having a driver output to produce an information signal representing the content (col. 3 lines 30-67, col. 4 lines 1-42, “interactive station controller 20 transmit digital information to and receive digital information from central node 12”, “station controller includes an input that delivers communications or information from central control node to a communication interpretation system”, “network communications interface 62c”), a decoder module operatively couple to the driver module to receive the information signal (col. 3 lines 60-63, digital video decoder), a user input module configured to receive user input (col. 4 lines 11-18, infrared receiver and decoder system that receives user input from a hand-held view control unit), and a system control module (col. 4 lines 9-18, CPU). Matthews also shows that the system control module, or CPU, in response to receiving user-input controls the driver and decoder modules to define a stream comprising a set of frames organized as plural streams (col. 4 lines 9-34, 44-67, fig. 4, video programming tiles corresponding to programming available on selected channels), wherein the control module, in response to a user selection, controls the driver module to access a representative frame for each scene comprising the program corresponding to the program selection and controls the decoder to produce a representative frame (col. 4 lines 45-67, “video tile” and “multi-frame video segment”), and that after a user has selected the one of the representative frames, the decoder module produces a signal of the

program, effectively showing one or more frames (col. 6 lines 1-34, col. 9 lines 40-55, Matthews shows that when a user highlights a still-frame, a multi-frame video sequence or broadcast is shown, effectively showing the program or movie). Matthews shows a content input component (col. 3 lines 50-67, input 60 that delivers communications or information from central control node...having...an analog television demodulator, a digital video decoder, and a digital network interface) but fails to show that this component records audio-visual information, the content input component producing a signal representing the A/V information, and the driver module configured to store the information on a storage medium. Steyer shows a content input component capable of storing audio-visual material (col. 1 lines 55-61, col. 3 lines 55-61, col. 6 lines 1-3, fig. 3 item 35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews with the ability to record a selected program so that the user could watch the program at his or her leisure.

Regarding Claim 22, Matthews shows a data store (col. 6 lines 35-67, "memory of station controller") coupled to receive location data present in the information signal, the location data indicating the location of the scenes contained on the storage medium, wherein the driver module accesses a representative frame based on the location data (col. 6 lines 35-67, col. 7 lines 21-67, col. 8 lines 1-35, EPG databases contains pointers to previews or display imagery relating to the series in still image, audio, or multi-frame digital video format).

Regarding Claim 23, Matthews shows that the system control module controls the driver to store the location data on the storage medium (col. 5 lines 62-67, col. 6 lines 35-

63, col. 7 lines 36-67, col. 8 lines 1-38, storing EPG data that contains pointers to representative frames).

Regarding Claim 24, Matthews shows a display device (col. 4 lines 20-25)

Regarding Claim 27, Steyer shows providing time-of-day information (col. 6 lines 15-22).

Regarding Claim 28, Matthews shows displaying the representative frames in a row and column fashion (fig. 4).

Regarding Claim 32, Matthews shows a method of accessing content contained on a storage medium (col. 9 lines 40-55, col. 11 lines 20-47, "media servers provide storage and on-demand or near on-demand delivery of digitized video...full length motion pictures"), the content comprising plural frames (col. 3 lines 20-25, col. 4 lines 45-61, col. 7 lines 60-65, full motion MPEG-2 video, "multi-frame video segment relating to programming available on a corresponding one of the selected channels"). Matthews shows receiving an input signal representing frames of A/V information (col. 3 lines 50-67, input 60 that delivers communications or information from central control node...having...an analog television demodulator, a digital video decoder, and a digital network interface). Matthews also shows producing a first display signal representing first information comprising a representative frame from a scene from each program (col. 4 lines 45-67, "video tile" and "multi-frame video segment") and receiving a program selection and in response producing a second display signal comprising one or more of the scenes associated with the selected program (col. 6 lines 1-34, col. 9 lines 40-55, Matthews shows that when a user highlights a still-frame, a multi-frame video sequence

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or broadcast is shown, effectively showing the program or movie). Matthews fails to show recording and storing the audio-visual information. Steyer shows a content input component capable of storing audio-visual material (col. 1 lines 55-61, col. 3 lines 55-61, col. 6 lines 1-3, fig. 3 item 35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews with the ability to record a selected program so that the user could watch the program at his or her leisure.

6. Claims 20-21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews III (5,815,145) in further view of Steyer et al (5,822,014) and Legrand (6,020,930).

Regarding Claim 20, Matthews and Steyer fail to show the user provided command controls the module to identify a frame as a representative frame. Legrand shows that when a user selects a number of channels for the picture electronic program (which is a user command) the system module captures a designated frame for the programs (col. 7 lines 28-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews and Steyer with the ability to capture the frames as in Legrand so that the user was presented with video images that are pertaining to currently running content.

***The following art rejection is based on the Examiner's best understanding of the Claimed limitations in light of the above 35 USC 112 2nd paragraph rejection.

Regarding Claim 21, Legrand shows that the frames are captured when the user selects the channels (col. 7 lines 28-36).

Regarding Claim 25, Matthews and Steyer fail to show displaying the date.

Legrand shows displaying date information regarding a program (col. 5 lines 11-25, EPG data including current date and time). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews and Steyer with the ability to show date information so that the user would be informed of the date of a related program.

Claim 26

7. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews III (5,815,145) in further view of Hassell et al (US 2004/128685).

Regarding Claim 10, Matthews fails to show representing the numerical values as plural ranges of numerical values. Hassell shows representing the numerical values as plural ranges of numerical values (fig. 13, volumes 1-4 representing programs 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews with the ranges of numerical values as in Hassell so that the user could navigate a large number of programs more easily.

Regarding Claim 11, Hassell shows the ability to select a numerical value range (fig. 13, item 255 "please load volume 1"). Matthews shows that when programs are selected that a frame representing a scene of each program is displayed (col. 6 lines 1-34, col. 9 lines 40-55, Matthews shows that when a user highlights a still-frame, a multi-frame video sequence or broadcast is shown, effectively showing the program or movie). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews with the ranges of numerical values as in Hassell so that

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the user could navigate a large number of programs more easily and visually recognize a selected program.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews III (5,815,145) in further view of Gagnon et al (6,522,342).

Regarding Claim 16, Matthews shows that the display signal comprises a row of tabs (fig. 4 item 106) comprising an id symbol identifying one of the programs (fig. 4 item 106a), and the tab corresponding to the user selection being visually distinct from the other tabs (fig. 4 item 102a). Matthews fails to show an overlapping fashion.

Gagnon shows the use of a overlapping images (fig. 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews with the overlapping display ability in order to save space on the EPG display and not interfere with other information.

9. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews III (5,815,145) in further view of Steyer et al (5,822,014) and Hasell et al (2004/0128685).

Regarding Claim 26, Matthews and Steyer fail to show that the display signal represents user-provided information. Hasell shows providing user-provided information regarding an available program (fig. 10, item 101). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matthews and Steyer with the ability to show user-provided information so that the user was aware if he or she had provided the system with information regarding the selected program.

Conclusion

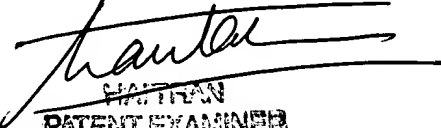
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Nalevanko whose telephone number is 703-305-8093. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PATENT EXAMINER